

R. Bpu10I α

MGVEQEWIKNITDMYQSPELIPSHASNLLHQLKREKRNEKLKKALEIITP	50
NYISYISILLNNHNMTRKEIVILVDALNEYMNTLRHPSVKSVFSHQADFY	100
SSVLPEFFNLLFRNLIKGLNEKIKVNSQKDIIIDCIFDPYNEGRVVFKKK	150
RVDVAIILKNKFVFNVEIS <u>D</u> FAIPLVAI <u>EIK</u> TNLDKNMLSGIEQSVDSL	200
KETFPLCLYYCITELADFAIEKQNYASTHIDEVFILRKQKRGPVRRGTPL	250
EVVHADLILEVVEQVGEHLSKFKDPIKTLKARMTGYLIKGGK	294

R. Bpu10I β

MTQIDLSNTKHGSILFEKQKNVKEKYLQQAYKHYLYFRRSIDGLEITNDE	50
AIFKLTQAANNYRDNVLYLFESRPNSGQEAFRYTILEEFFYHLFKDLVKK	100
KFNQEPSSIVMGKANSYVSLSFSPESFLGLYENPIPYIHTKDQDFVLGCA	150
VDLKISPKNELNKENET <u>E</u> IVVPVIAI <u>ECK</u> TYIERNMLDSCAATASRLKAA	200
MPYCLYIVASEYMKMDQAYPELTDIDEVFILCKASVGERTALKKKGLPPH	250
KLDENLMVELFHMVERHLNRVWWSNEALSRRVIGRP	288

FIGURE 1

Subunit	Mutation*	Cleavage dsDNA	of Nicking activity
<i>Bpu</i> 10I α	D171A	+++	-
<i>Bpu</i> 10I α	E180A	++	+
<i>Bpu</i> 10I α	E180Q	+	++
<i>Bpu</i> 10I β	E168A	+++	-
<i>Bpu</i> 10I β	E177A	-	+++
<i>Bpu</i> 10I β	E177Q	+	+++
<i>Bpu</i> 10I β	K179	-	-

FIGURE 2

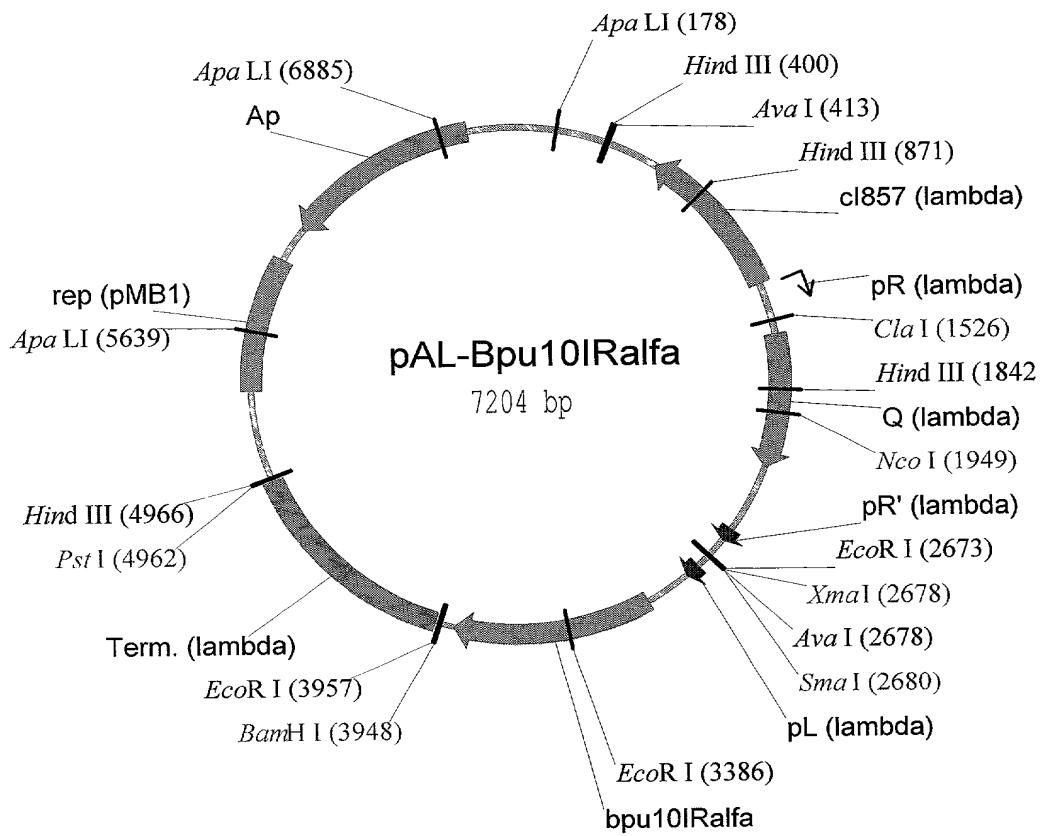


FIGURE 3

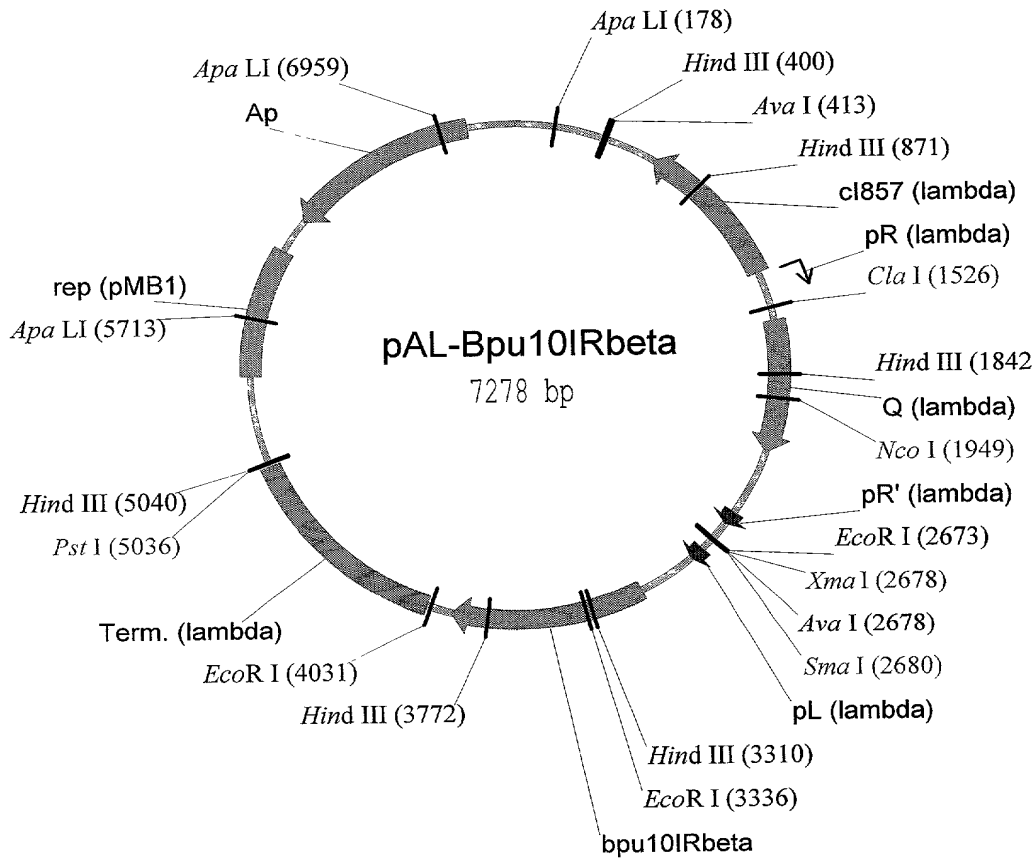


FIGURE 4

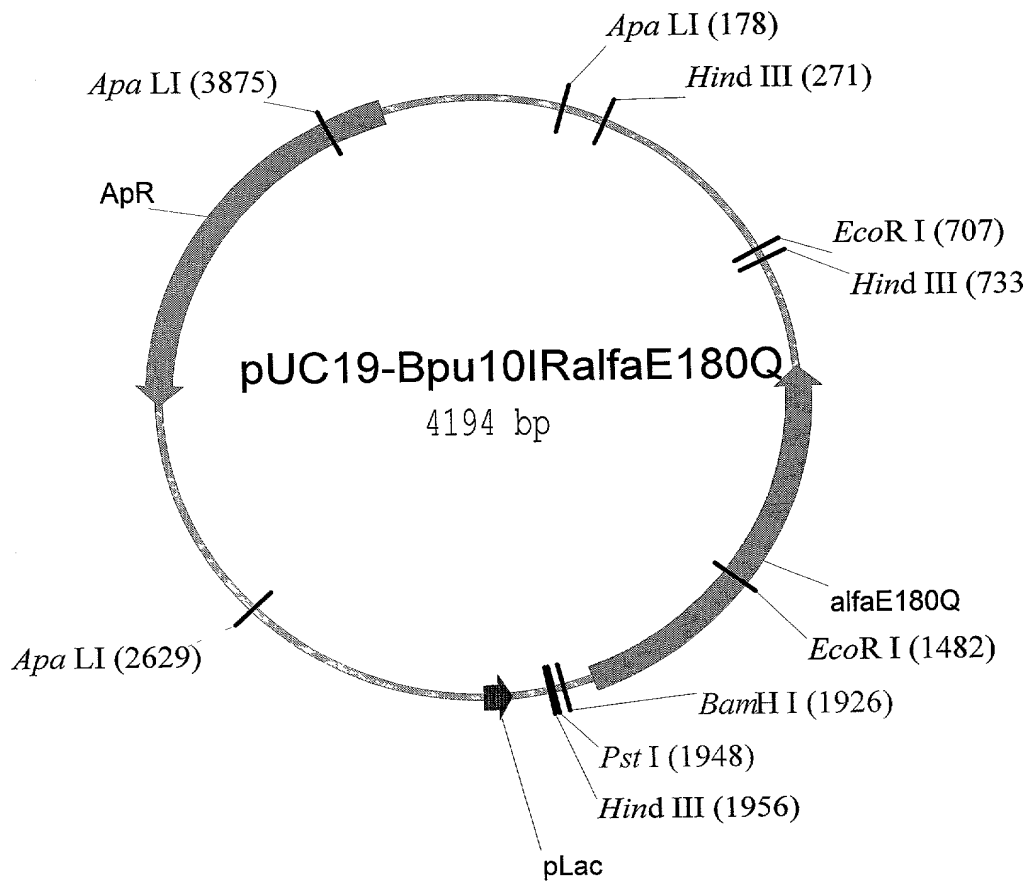


FIGURE 5

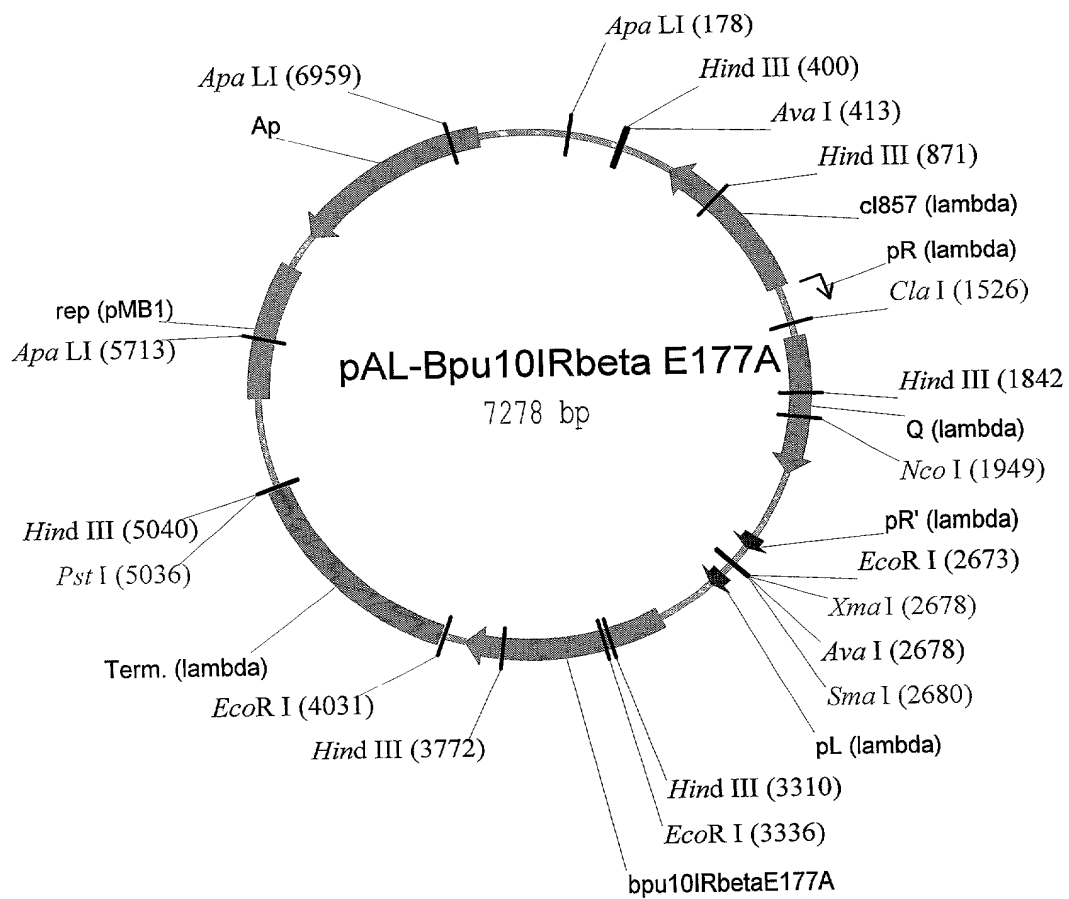


FIGURE 6

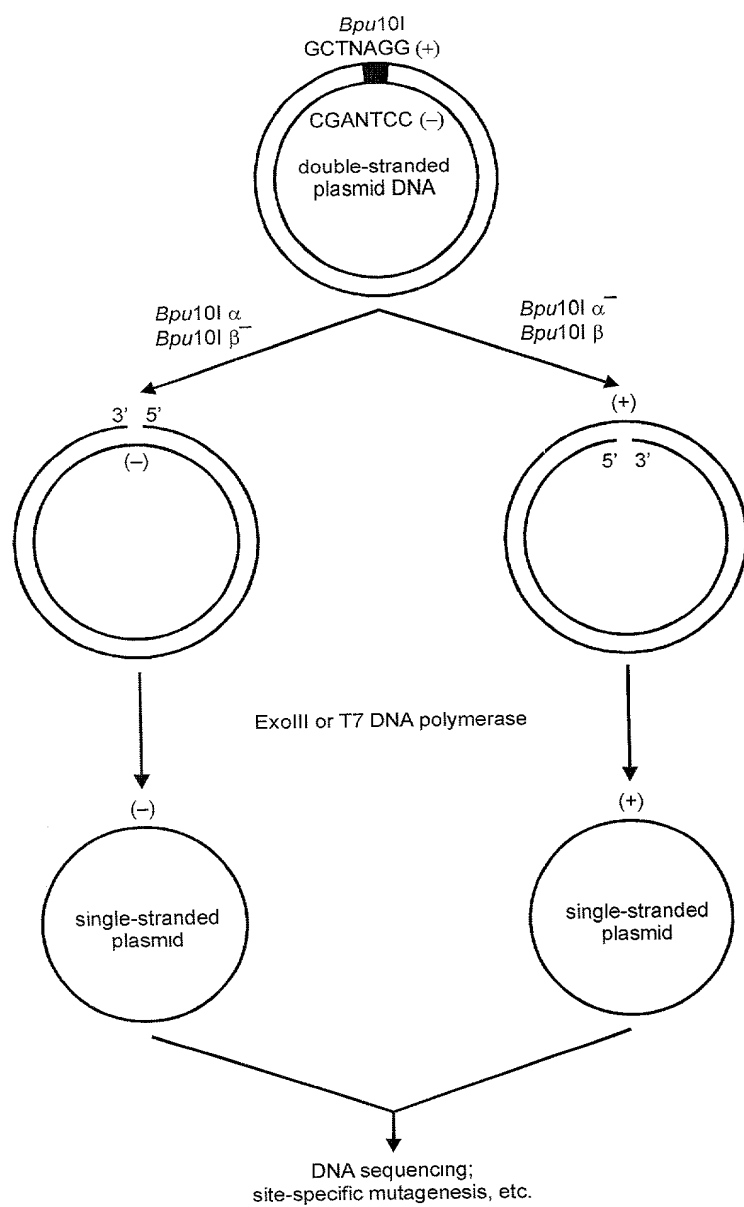


FIGURE 7

Specific or mono
nucleotide sequences

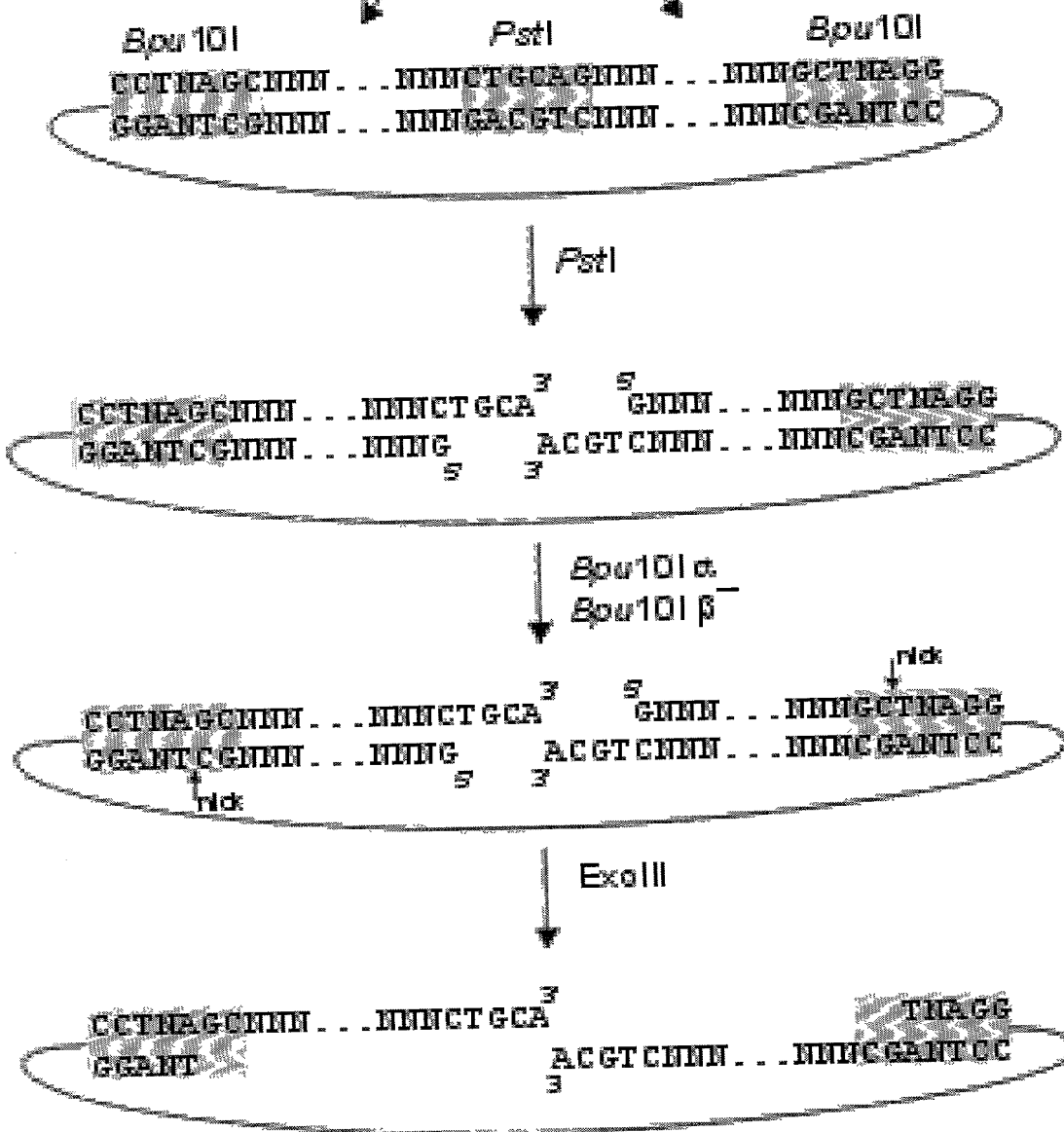
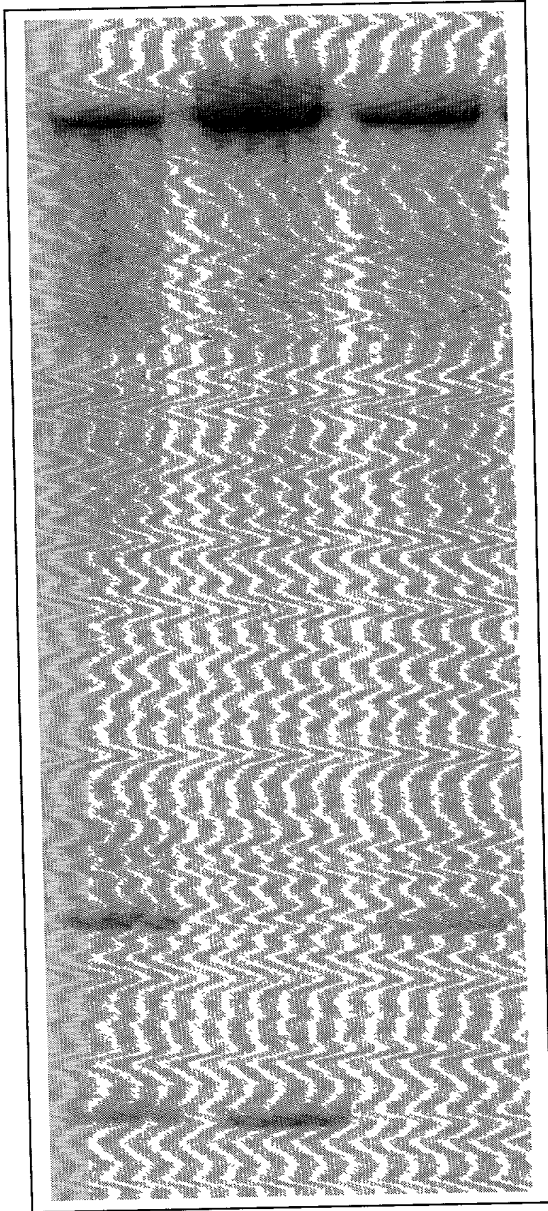


FIGURE 8

↓ 5 min. 95°C, ligation

FIGURE 9

1 2 3



← 5'-CCTAAGC-3'

←5'-GCTTAGG-3'

FIGURE 10

11/11

1 2 3 4 5 6 7 8 9 10

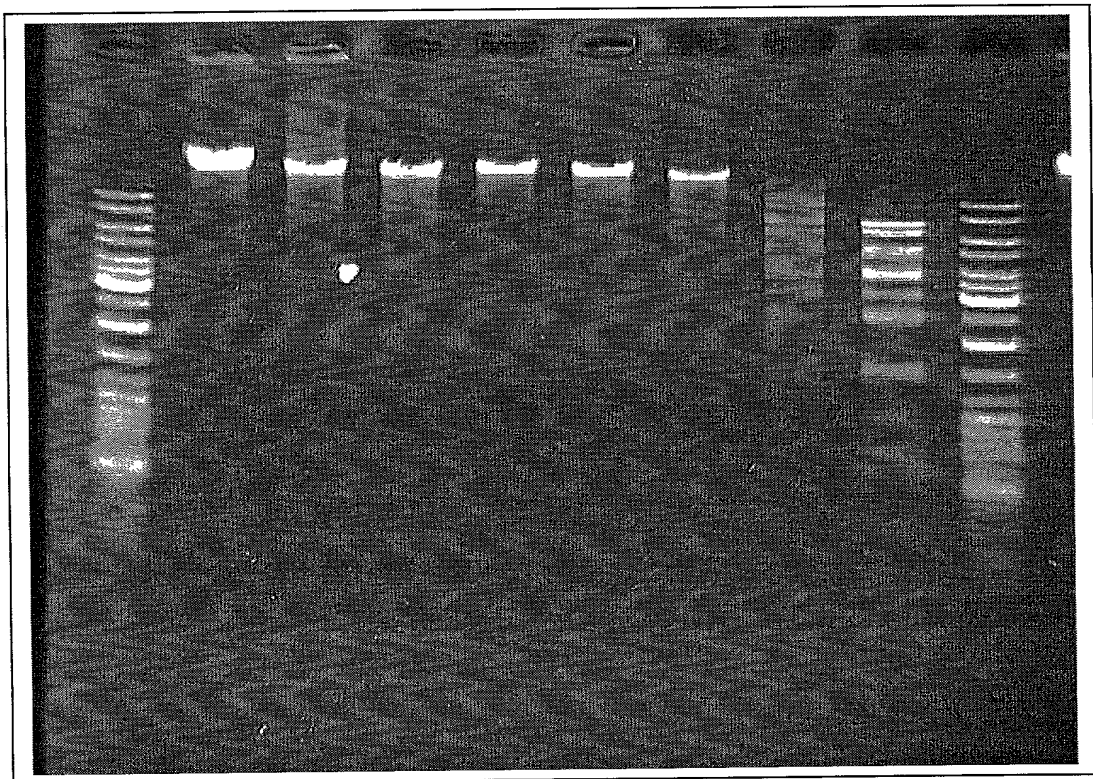


FIGURE 11